

050

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:00

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

ENTERED

```

3 <110> APPLICANT: Welcher, Andrew A.
4   Jing, Shuqian
5   Luethy, Roland
7 <120> TITLE OF INVENTION: Interleukin-1 Receptor Antagonist-Like Molecules and
8   Uses Thereof
10 <130> FILE REFERENCE: 00-1214
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/723,676
C--> 13 <141> CURRENT FILING DATE: 2000-11-28
15 <150> PRIOR APPLICATION NUMBER: 60/170,052
16 <151> PRIOR FILING DATE: 1999-12-10
18 <160> NUMBER OF SEQ ID NOS: 18
20 <170> SOFTWARE: PatentIn Ver. 2.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1244
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
27 <220> FEATURE:
28 <221> NAME/KEY: CDS
29 <222> LOCATION: (301)..(774)
31 <400> SEQUENCE: 1
32 gtgttgcctc actgtcagtc ctccagagcc tcaagagatc tttgggcat atcagctttc 60
33 tttccaaaat gaacacaccc aggggcagga aagaatgctc tttccttggc cattaagggg 120
34 cctgggagtc ctggaccagc ttttcagcga gctagaccac ttacatgcaa ctagagcctt 180
35 gactttgaaa cgagggacaa aagcatctct tgcataaggt aactttctgt gcttagaacc 240
36 cagcctcctc accaaccatct gatctatctt gttctcttca caaaaggctc tgaagacatc 300
37 atg aac cca caa cgg gag gca gca ccc aaa tcc tat gct att cgt gat 348
38 Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
39 1 5 10 15
40 tct cga cag atg gtg tgg gtc ctg agt gga aat tct tta ata gca gct 396
41 Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala
42 20 25 30
43 cct ctt agc cgc agc att aag cct gtc act ctt cat tta ata gcc tgt 444
44 Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
45 35 40 45
46 aga gac aca gaa ttc agt gac aag gaa aag ggt aat atg gtt tac ctg 492
47 Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu
48 50 55 60
49 gga atc aag gga aaa gat ctc tgt ctc ttc tgt gca gaa att cag ggc 540
50 Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly
51 65 70 75 80
52 aag cct act ttg cag ctt aag gaa aaa aat atc atg gac ctg tat gtg 588
53 Lys Pro Thr Leu Gln Leu Lys Glu Lys Asn Ile Met Asp Leu Tyr Val
54 85 90 95
55 gag aag aaa gca cag aag ccc ttt ctc ttt ttc cac aat aaa gaa ggc 636
56 Glu Lys Lys Ala Gln Lys Pro Phe Leu Phe Phe His Asn Lys Glu Gly
57 100 105 110
58 tcc act tct gtc ttt cag tca gtc tct tac cct ggc tgg ttc ata gcc 684

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:00

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

```

71 Ser Thr Ser Val Phe Gln Ser Val Ser Tyr Pro Gly Trp Phe Ile Ala
72      115      120      125
74 acc tcc acc aca tca gga caq ccc atc ttt ctc acc aag gag aga ggc 732
75 thr Ser Thr Thr Ser Gly Gln Pro Ile Phe Leu thr Lys Glu Arg Gly
76      130      135      140
78 ata act aat aac act aac ttc tac tta gat tct gtg gaa taa / 774
79 Ile Thr Asn Asn Thr Asn Phe Tyr Leu Asp Ser Val Glu
80 145      150      155
82 atccagccta ggcgtgtgggt ggcgtgttcc aggatagaga atcaagctgt cagagtcac 834
84 ttaacagatc attatgcgac tgagttcact agcagttcag cccatccata gcttacctca 894
86 ttcttactat ccaaaagcca cctcctcctc caaacatcca ttctgtacc aagaccctca 954
88 ctggaatgtc actatcccaa gatgaaacct aaaaatcact ttccattctt tcttgatctt 1014
90 accccaccat ccaatcagct gccatgcccc gtttagttaa ccccccaat gctgcttcat 1074
92 gcaaccttcc attcctatct cttttgccaa cccatgatgt agagatgtgg attcatgaca 1134
94 ttttgttcat acaacttctt caataaaaca ttataatatg tgccccaag ataaagctga 1194
96 aqaatgagat gaatgtgaaa ttaaagqttt gcattgtctt ctaatcctaa 1244
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 157
101 <212> TYPE: PRT
102 <213> ORGANISM: Homo sapiens
104 <400> SEQUENCE: 2
105 Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
106 1      5      10      15
108 Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala
109      20      25      30
111 Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
112      35      40      45
114 Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu
115      50      55      60
117 Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly
118      65      70      75      80
120 Lys Pro Thr Leu Gln Leu Lys Glu Lys Asn Ile Met Asp Leu Tyr Val
121      85      90      95
123 Glu Lys Lys Ala Gln Lys Pro Phe Leu Phe Phe His Asn Lys Glu Gly
124      100      105      110
126 Ser Thr Ser Val Phe Gln Ser Val Ser Tyr Pro Gly Trp Phe Ile Ala
127      115      120      125
129 Thr Ser Thr Thr Ser Gly Gln Pro Ile Phe Leu Thr Lys Glu Arg Gly
130      130      135      140
132 Ile Thr Asn Asn Thr Asn Phe Tyr Leu Asp Ser Val Glu
133 145      150      155
136 <210> SEQ ID NO: 3
137 <211> LENGTH: 164
138 <212> TYPE: PRT
139 <213> ORGANISM: Homo sapiens
141 <400> SEQUENCE: 3
142 Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
143 1      5      10      15
145 Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala

```

RAW SEQUENCE LISTING

PATIENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:00

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

```

146          20          25          30
148 Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
149          35          40          45
151 Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu
152          50          55          60
154 Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly
155          65          70          75          80
157 Lys Pro Thr Leu Gln Leu Lys Leu Gln Gly Ser Gln Asp Asn Ile Gly
158          85          90          95
160 Lys Asp Thr Cys Trp Lys Leu Val Gly Ile His Thr Cys Ile Asn Leu
161          100         105         110
163 Asp Val Arg Glu Ser Cys Phe Met Gly Thr Leu Asp Gln Trp Gly Ile
164          115         120         125
166 Gly Val Gly Arg Lys Lys Trp Lys Ser Ser Phe Gln His His His Leu
167          130         135         140
169 Arg Lys Lys Asp Lys Asp Phe Ser Ser Met Arg Thr Asn Ile Gly Met
170 145          150          155          160
172 Pro Gly Arg Met
176 <210> SEQ ID NO: 4
177 <211> LENGTH: 158
178 <212> TYPE: PRT
179 <213> ORGANISM: Homo sapiens
181 <400> SEQUENCE: 4
182 Met Glu Lys Ala Leu Lys Ile Asp Thr Pro Gln Gln Gly Ser Ile Gln
183 1          5          10          15
185 Asp Ile Asn His Arg Val Trp Val Leu Gln Asp Gln Thr Leu Ile Ala
186          20          25          30
188 Val Pro Arg Lys Asp Arg Met Ser Pro Val Thr Ile Ala Leu Ile Ser
189          35          40          45
191 Cys Arg His Val Glu Thr Leu Glu Lys Asp Arg Gly Asn Pro Ile Tyr
192          50          55          60
194 Leu Gly Leu Asn Gly Leu Asn Leu Cys Leu Met Cys Ala Lys Val Gly
195          65          70          75          80
197 Asp Gln Pro Thr Leu Gln Leu Lys Glu Lys Asp Ile Met Asp Leu Tyr
198          85          90          95
200 Asn Gln Pro Glu Pro Val Lys Ser Phe Leu Phe Tyr His Ser Gln Ser
201          100         105         110
203 Gly Arg Asn Ser Thr Phe Glu Ser Val Ala Phe Pro Gly Trp Phe Ile
204          115         120         125
206 Ala Val Ser Ser Glu Gly Gly Cys Pro Leu Ile Leu Thr Gln Glu Leu
207          130         135         140
209 Gly Lys Ala Asn Thr Thr Asp Phe Gly Leu Thr Met Leu Phe
210 145          150          155
213 <210> SEQ ID NO: 5
214 <211> LENGTH: 177
215 <212> TYPE: PRT
216 <213> ORGANISM: Homo sapiens
218 <400> SEQUENCE: 5
219 Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:00

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

```

220      1              5              10              15
222 Phe Leu Phe His Ser Glu Thr Ile Cys Arg Pro Ser Gly Arg Lys Ser
223              20              25              30
225 Ser Lys Met Gln Ala Phe Arg Ile Trp Asp Val Asn Gln Lys Thr Phe
226              35              40              45
228 Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly Pro Asn
229              50              55              60
231 Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu Pro His Ala
232      65              70              75              80
234 Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys Val Lys
235              85              90              95
237 Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile Thr Asp
238              100              105              110
240 Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg Ser
241              115              120              125
243 Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly Trp
244      130              135              140
246 Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser Leu Thr Asn
247 145              150              155              160
249 Met Pro Asp Glu Gly Val Met Val Thr Lys Phe Tyr Phe Gln Glu Asp
250              165              170              175
252 Glu
256 <210> SEQ ID NO: 6
257 <211> LENGTH: 153
258 <212> TYPE: PRT
259 <213> ORGANISM: Homo sapiens
261 <400> SEQUENCE: 6
262 Ala Pro Val Arg Ser Leu Asn Cys Thr Leu Arg Asp Ser Gln Gln Lys
263      1              5              10              15
265 Ser Leu Val Met Ser Gly Pro Tyr Glu Leu Lys Ala Leu His Leu Gln
266              20              25              30
268 Gly Gln Asp Met Glu Gln Gln Val Val Phe Ser Met Ser Phe Val Gln
269              35              40              45
271 Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu
272      50              55              60
274 Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu
275      65              70              75              80
277 Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu
278              85              90              95
280 Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe
281              100              105              110
283 Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu
284              115              120              125
286 Asn Met Pro Val Phe Leu Gly Gly Thr Lys Gly Gly Gln Asp Ile Thr
287      130              135              140
289 Asp Phe Thr Met Gln Phe Val Ser Ser
290 145              150
293 <210> SEQ ID NO: 7
294 <211> LENGTH: 11

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:00

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

```

295 <212> TYPE: PRT
296 <213> ORGANISM: Human immunodeficiency virus type 1
298 <400> SEQUENCE: 7
299 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
300   1             5             10
303 <210> SEQ ID NO: 8
304 <211> LENGTH: 15
305 <212> TYPE: PRT
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence: internalizing
310     domain derived from HIV tat protein
312 <400> SEQUENCE: 8
313 Gly Gly Gly Gly Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
314   1             5             10             15
317 <210> SEQ ID NO: 9
318 <211> LENGTH: 23
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Description of Artificial Sequence:
324     Oligonucleotide 2362-94
326 <400> SEQUENCE: 9
327 catggacctg tatgtggaga aga                23
330 <210> SEQ ID NO: 10
331 <211> LENGTH: 23
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Description of Artificial Sequence:
337     Oligonucleotide 2362-95
339 <400> SEQUENCE: 10
340 gccagggtaa gagactgact gaa                23
343 <210> SEQ ID NO: 11
344 <211> LENGTH: 23
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Description of Artificial Sequence:
350     Oligonucleotide 870-02
352 <400> SEQUENCE: 11
353 agcggataac aatttcacac agg                23
356 <210> SEQ ID NO: 12
357 <211> LENGTH: 24
358 <212> TYPE: DNA
359 <213> ORGANISM: Artificial Sequence
361 <220> FEATURE:
362 <223> OTHER INFORMATION: Description of Artificial Sequence:
363     Oligonucleotide 2366-21

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/723,676

DATE: 12/08/2000

TIME: 15:22:01

Input Set : A:\001214seq.txt

Output Set: N:\CRF3\12082000\I723676.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date